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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,487	09/21/2004	Khamir Girish Joshi	04-11	5486
32583 7590 12/12/2007 KELLOGG BROWN & ROOT LLC ATTN: Christian Heausler 4100 Clinton Drive HOUSTON, TX 77020			EXAMINER SINGH, SUNIL	
			ART UNIT 3672	PAPER NUMBER
			MAIL DATE 12/12/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/711,487		JOSHI ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Sunil Singh		3672	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 58-62 and 64-72 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 58-62, 64-72 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____.                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 66-68,71,72 are rejected under 35 U.S.C. 102(b) as being anticipated by Maloberti et al. (US 4906137).

Maloberti et al. discloses a pipeline comprising a first unbuoyed section (3b), second unbuoyed section (3a), at least one buoyancy section (4, see col. 3 line 45+1) disposed between the first and second sections.

With regards to claim 71, it should be noted that applicant is claiming a "pipeline".

Claim 71 is further limiting the "seabed" which is not structurally limiting the pipeline but instead it is further limiting where it is used and not the actual structure.

3. Claims 66-68,71,72 are rejected under 35 U.S.C. 102(b) as being anticipated by Richmond et al. (US 5582252)

Richmond et al. discloses a pipeline comprising a first unbuoyed section (22, to the left in Fig. 1), second unbuoyed section (22, to the right in Fig. 1), at least one buoyancy section (24,26) disposed between the first and second sections.

With regards to claim 71, it should be noted that applicant is claiming a "pipeline".

Claim 71 is further limiting the "seabed" which is not structurally limiting the pipeline but instead it is further limiting where it is used and not the actual structure.

4. Claims 66-68,71,72 are rejected under 35 U.S.C. 102(b) as being anticipated by Luppi (US 2005/0158126)

Luppi discloses a pipeline comprising a first unbuoyed section (11), second unbuoyed section (10), at least one buoyancy section (22-24) disposed between the first and second sections.

With regards to claim 71, it should be noted that applicant is claiming a "pipeline".

Claim 71 is further limiting the "seabed" which is not structurally limiting the pipeline but instead it is further limiting where it is used and not the actual structure.

5. Claims 66-69,71,72 rejected under 35 U.S.C. 102(a) as being anticipated by Wipo '014. (WO 2004/068014).

Wipo '014 discloses a pipeline comprising a first unbuoyed pipeline section (2), a second unbuoyed pipeline section (3), at least one distributed buoyancy section (6,25,26) comprising two or more buoyancy solutions (36, see Figs.1, 5-7, col. 4 line 1).

With regards to claim 71, it should be noted that applicant is claiming a "pipeline".

Claim 71 is further limiting the "seabed" which is not structurally limiting the pipeline but instead it is further limiting where it is used and not the actual structure.

6. Claims 58-59, 61-62, 64-65 are rejected under 35 U.S.C. 102(a) as being anticipated by Wipo '014. (WO 2004/068014).

Wipo '014 discloses an apparatus (1) to traverse a seabed topographic feature comprising a subsea pipeline (1) constructed to carry fluids from a first location (this is considered as the left of Fig. 1) across the topographic feature to a second location (this is considered as the right of Fig. 1) wherein the topographic feature is selected from the group consisting of subsea, basins, domes, valleys, cliffs, canyons, escarpments and combinations thereof, said pipeline including at least one distributed buoyancy region (6,25,26) said pipeline comprising a first unbuoyed pipeline section (2)

extending from said first location on a sea floor (4) to said distributed buoyancy region and a second unbuoyed pipeline section (3) extending from said distributed buoyancy region to said second location on a sea floor and said distributed buoyancy region connecting said first and said second pipeline sections in fluid communication. The two buoyancy solutions (36, see Figs. 1,5-7, col. 4 line 1) and the flexible positively buoyant inverse section is considered as the section where (36, see Figs. 1,5-7, col. 4 line 1 buoyancy members are positioned). Tether system (see Figures). First flexure (7) and second flexure (8).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 69 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maloberti et al.

Maloberti et al. discloses the invention substantially as claimed. However, Maloberti et al. is silent about the buoy(4) being tethered. Tethered buoys are old and well known. It would have been considered obvious to one of ordinary skill in the art to modify Maloberti et al. to make his buoys tethered buoys since such a modification is a design choice.



9. Claim 70 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maloberti et al. in view of Moses et al. (Us 5615977).

Maloberti et al. discloses the invention substantially as claimed. However, Maloberti et al. is silent about the buoy(4) being a buoyant coating. Moses et al. teaches buoy being a buoyant coating (42, Fig. 3). It would have been considered obvious to one of ordinary skill in the art to modify Maloberti et al. to make his buoys in the form of buoyant coating as taught by Moses et al. since such a modification is a design choice. Such modification prevents rupturing.

10. Claim 69 is rejected under 35 U.S.C. 103(a) as being unpatentable over Richmond et al. .

Richmond et al. discloses the invention substantially as claimed. However, Richmond et al. is silent about the buoy(26) being tethered. Tethered buoys are old and well known. It would have been considered obvious to one of ordinary skill in the art to modify Richmond et al. to make his buoys tethered buoys since such a modification is a design choice.

11. Claim 70 is rejected under 35 U.S.C. 103(a) as being unpatentable over Richmond et al. in view of Moses et al. (Us 5615977).

Richmond et al. discloses the invention substantially as claimed. However, Richmond et al. is silent about the buoy(26) being a buoyant coating. Moses et al. teaches buoy being a buoyant coating (42, Fig. 3). It would have been considered obvious to one of

ordinary skill in the art to modify Richmond et al. to make his buoys in the form of buoyant coating as taught by Moses et al. since such a modification is a design choice. Such modification prevents rupturing.

12. Claim 60, 70 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wipo '014 in view of Moses et al. (Us 5615977).

Wipo '014 discloses the invention substantially as claimed. However, Wipo '014 is silent about the buoyancy modules (see col. 4 line1) being a buoyant coating. Moses et al. teaches buoyancy modules being a buoyant coating (42, Fig. 3). It would have been considered obvious to one of ordinary skill in the art to modify Wipo '014 to make his buoyancy modules in the form of buoyant coating as taught by Moses et al. since such a modification is a design choice. Such modification prevents rupturing.

### ***Response to Arguments***

13. Applicant's arguments filed 9/25/07 have been fully considered but they are not persuasive. Applicant argues that Wipo '014 does not teach buoyancy solutions disposed about an outer diameter. The examiner disagrees. Frame (25) surrounds (26) and frame (25) comprise buoyancy members (36 or see col. 4 line 1); therefore the buoyancy solutions are disposed about an outer diameter of (26).

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon



hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). For example, one skilled in the art would know to substitute one type of buoyancy element with another type depending on the circumstance. For example, it would be obvious to use the buoyancy module that is a buoyant coating since one would not worry about rupturing.

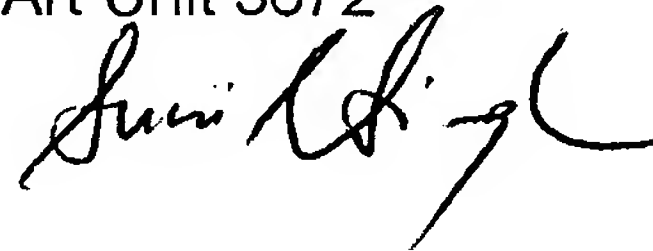
### ***Conclusion***

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunil Singh whose telephone number is (571) 272-7051. The examiner can normally be reached on Monday through Friday 10:30 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sunil Singh  
Primary Examiner  
Art Unit 3672



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